UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,183	10/29/2003	Cheng-Hwa Liu	252011-1740	6537

47390   7590   10/14/2008
THOMAS, KAYDEN, HORSTEMEYER & RISLEY LLP
600 GALLERIA PARKWAY, 15TH FLOOR
ATLANTA, GA 30339

EXAMINER
STERRETT, JONATHAN G

ART UNIT	PAPER NUMBER
3623	

MAIL DATE	DELIVERY MODE
10/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 June 2008*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Non-Final Office Action is responsive to the amendment of 16 June 2008.

Currently Claims 1-24 are pending in the application.

Response to Argument

The applicant's arguments have been fully considered but are not persuasive.

The applicant argues that Jenkins fails to teach the preamble's limitations of a

method of dynamic customer demand forecasting.

The examiner respectfully disagrees.

In response to applicant's arguments, the recitation "method of dynamic

customer demand forecasting" has not been given patentable weight because the

recitation occurs in the preamble. A preamble is generally not accorded any patentable

weight where it merely recites the purpose of a process or the intended use of a

structure, and where the body of the claim does not depend on the preamble for

completeness but, instead, the process steps or structural limitations are able to stand

alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*,

187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

The applicant argues that Jenkins fails to teach the claimed limitation of "inputting at least one forecast rule".

The examiner respectfully disagrees.

Jenkins teaches the inputting of allocations to spread inventory to meet demand (see para 30, a user can prorate the forecast – this is inputting of a rule – i.e. the prorating). Prorating orders to meet demand is a forecast rule, because it is a rule that applies to how the forecast is spread.

The applicant argues that Jenkins fails to teach calculating the forecast hit rate corresponding to the forecast rule.

The examiner respectfully disagrees.

The limitation argued is the subject of Official Notice in combination with Jenkins.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 is rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would <u>not</u> qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps, fail the first prong of the new Federal Circuit decision since they are not tied to another statutory class and can be performed without the use of a particular apparatus. Thus, **Claim 1** is non-statutory since it may be performed within the human mind. **Claims 2-7** are dependent on **Claim 1** and are not statutory at least for the reasons given above for **claim 1**.

Claim 7 is a computer system comprised of modules. Modules are considered

software not tangibly embodied on computer readable medium and thus are considered

software per se. Software per se is printed matter and is not statutory under 35 USC

101. **Claims 8-12** depend on **Claim 7** and are similarly not statutory.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

5.   Claim 1, 3-7, 9-13, 15-19 and 21-24 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Jenkins et al. (U.S. Pub No. 2002/0188499 A1).

Regarding to claim 1, Jenkins et al. discloses the invention substantially as claimed. Jenkins et al. discloses a computer implemented method of dynamic customer demand forecasting (paragraph [0002], lines 1-2), comprising using a computer (i.e. external system/web-client, see fig. 1b) to perform the steps of: inputting at least one forecast rule (paragraph [0028], lines 1-4, paragraph [0029], lines 1-3); accumulating forecasted demand (paragraph [0030], lines 7-10), selecting a highest hit rate from the forecast hit rate; and designating the forecast rule corresponding to the highest hit rate as a target rule (paragraph [0034], lines 1-3, paragraph [0037], lines 1-7). However, Jenkins et al does not explicitly disclose calculating at least one forecast hit rate, each of which corresponds to a forecast rule. It is common knowledge in the prior art (Official Notice) to calculate (i.e. accumulate) a forecast hit rate (i.e. orders) corresponding to a forecast rule when accumulating forecasted demand. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the method of Jenkins et al. to include to feature of calculating at least one forecast hit rate (i.e. orders), each of which corresponds to a forecast rule. The motivation for doing so would have been to adjust/modify the forecasted demand by selecting the highest hit rate as the target rule.

Regarding to claim 7, Jenkins et al. discloses the invention substantially as claimed. Jenkins et al. discloses an apparatus (i.e. machine/server) of dynamic customer demand forecasting (see fig. 1a), comprising: inputting at least one forecast rule (paragraph [0028], lines 1-4, paragraph [0029], lines 1-3); accumulating forecasted demand (paragraph [0030], lines 7-10), accumulating forecasted demand (paragraph

[0030], lines 7-10), selecting a highest hit rate from the forecast hit rate; and designating

the forecast rule corresponding to the highest hit rate as a target rule (paragraph [0034],

lines 1-3, paragraph [0037], lines 1-7). However Jenkins et al. does not explicitly

disclose an input module, a calculation module, coupled to the input module, calculating

at least one forecast hit rate, each of which corresponds to a forecast rule; a selection

module, coupled to the calculation module, and a designation module, coupled to the

selection module. It is common knowledge in the prior art for the apparatus of Jenkins

et al. to include various modules (i.e. input module, calculation module, selection

module, designation module, etc.) and to calculate (i.e. accumulate) a forecast hit rate

(i.e. orders) corresponding to a forecast rule when accumulating forecasted demand.

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made for the apparatus of Jenkins et al. to include to feature of an

input module, a calculation module, coupled to the input module, calculating at least one

forecast hit rate, each of which corresponds to a forecast rule; a selection module,

coupled to the calculation module, and a designation module, coupled to the selection

module. The motivation for doing so would have been to separate the implementation

of performing a specific function of the apparatus in order to adjust/modify the

forecasted demand by selecting the highest hit rate as the target rule.

Regarding to claim 13, Jenkins et al. discloses the invention substantially as

claimed. Jenkins et al. discloses a storage medium (i.e. external system/server, see fig.

1b) for storing a computer program providing a method of dynamic customer demand

forecasting (paragraph [0002], lines 1-2), the method comprising the steps of: inputting

at least one forecast rule (paragraph [0028], lines 1-4, paragraph [0029], lines 1-3);

accumulating forecasted demand (paragraph [0030], lines 7-10); selecting a highest hit

rate from the forecast hit rate; and designating the forecast rule corresponding to the

highest hit rate as a target rule (paragraph [0034], lines 1-3, paragraph [0037], lines 1-

7). However, Jenkins et al does not explicitly disclose calculating at least one forecast

hit rate, each of which corresponds to a forecast rule. It is common knowledge in the

prior art to calculate (i.e. accumulate) a forecast hit rate (i.e. orders) corresponding to a

forecast rule when accumulating forecasted demand. Therefore, it would have been

obvious to one having ordinary skill in the art at the time the invention was made for the

storage medium of Jenkins et al. to include to feature of calculating at least one forecast

hit rate (i.e. orders), each of which corresponds to a forecast rule. The motivation for

doing so would have been to adjust/modify the forecasted demand by selecting the

highest hit rate as the target rule.

Regarding to claim 19, Jenkins et al. discloses the invention substantially as

claimed. Jenkins discloses a system of dynamic customer demand forecasting

(paragraph [0002], lines 1-2), comprising: an operation computer (i.e. external

system/web client) (paragraph [0057], lines 1-5, see fig. 1b), inputting at least one

forecast rule (paragraph [0028], lines 1-4, paragraph [0029], lines 1-3), accumulating

forecasted demand (paragraph [0030], lines 7-10), selecting a highest hit rate from the

forecast hit rate, and designating the forecast rule corresponding to the highest hit rate

as a target rule (paragraph [0034], lines 1-3, paragraph [0037], lines 1-7); and at least

one database, coupled to the operation computer, storing the forecast rule, the forecast

hit rate, and the target rule (i.e. information for operation) (paragraph [0019], lines 1-3,

paragraph [0028], lines 1-6). However, Jenkins et al does not explicitly disclose

calculating at least one forecast hit rate, each of which corresponds to a forecast rule. It

is common knowledge in the prior art to calculate (i.e. accumulate) a forecast hit rate

(i.e. orders) corresponding to a forecast rule when accumulating forecasted demand.

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made for the system of Jenkins et al. to include to feature of

calculating at least one forecast hit rate (i.e. orders), each of which corresponds to a

forecast rule. The motivation for doing so would have been to adjust/modify the

forecasted demand by selecting the highest hit rate as the target rule.

Regarding to claims 3, 9, 15 and 21, Jenkins et al. discloses wherein the forecast

rule comprises a forecast base rule (i.e. forecast for the period) (paragraph [0029], lines

1-3) and at least one customer defined rule (i.e. input by customer orders) (paragraph

[0031], lines 1-2).

Regarding to claims 4, 10, 16 and 22 Jenkins et al. discloses integrating (i.e.

supplement) the forecast base rule and the customer defined rule into the forecast rule

(paragraph [0031], lines 1-2 and 6-8).

Regarding to claims 5, 11, 17 and 23, Jenkins et al. discloses the invention

substantially as claimed. Jenkins et al. discloses prorating the forecast by demand to

date (paragraph [0030], lines 1-3) and setting the need date on which the first demand

occurs (i.e. date of the first order) (paragraph [0048], lines 5-6). However, Jenkins et al.

does not explicitly disclose wherein the forecast base rule is produced according to the

most current order. It is common knowledge in the prior art to produce the forecast

base rule according to the most current order when prorating the forecast by demand to

date. Therefore, it would have been obvious to one having ordinary skill in the art at the

time the invention was made for the computer implemented method, apparatus, storage

medium and system of Jenkins et al. to include the feature of wherein the forecast base

rule is produced according to the most current order. The motivation for doing so would

have been to dynamically forecast demand and efficiently develop delivery capabilities

of customer orders based on the most current orders.

Regarding to claims 6, 12, 18 and 24, Jenkins et al. discloses wherein the

forecast hit rate is calculated according to orders (i.e. customer orders) (paragraph

[0031], lines 1-2 and 6-8, paragraph [0034], lines 1-3, paragraph [0037], lines 1-7).

6.   Claim 2, 8, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Jenkins et al. (U.S. Pub No. 2002/0188499 A1) in view of Borders et al. (U.S. Pat.

No. 7,139,721 B2).

Regarding to claims 2, 8, 14 and 20, Jenkins et al. discloses the invention

substantially as claimed. However, Jenkins et al. does not disclose providing the target

rule to a capacity allocation model for capacity allocation. Borders et al. discloses

providing customer order data (i.e. target rule) to determine an actual capacity allocation

distribution. Therefore, it would have been obvious to one having ordinary skill in the art

at the time the invention was made to combine the computer implemented method,

apparatus, storage medium and system of Jenkins et al. with the feature of providing

the target rule to a capacity allocation model for capacity allocation as taught by Borders

et al., as both Jenkins et al. and Borders et al. are directed to a computer implemented

method, apparatus, storage medium and system of dynamic customer demand

forecasting. The motivation for doing so would have been to efficiently develop delivery

capabilities of customer orders.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jonathan G Sterrett whose telephone number is 571-

272-6881. The examiner can normally be reached on Monday - Friday (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jonathan G. Sterrett/
Primary Examiner, Art Unit 3623
10-9-08